Abstract

In a motor vehicle driveline including a transfer case whose output is continually connected to a first output, a clutch, operating partially engaged, responds to a control signal to change the degree of clutch engagement, whereby a second output is connected driveably to the first output. A digital computer, repetitively executing a computer readable program code algorithm for operating the clutch partially engaged, continually selects a desired magnitude of clutch engagement with reference to functions indexed by vehicle speed and either engine throttle position or engine throttle rate. The computer repetitively updates at frequent intervals the desired degree of clutch engagement, and issues a command clutch duty cycle to a solenoid-controlled valve, which signal changes the degree of clutch engagement in response to the command signal.